NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

FISHPOND MANAGEMENT

(No.)
CODE 399

DEFINITION

Developing or improving impounded water to produce fish for domestic use or recreation.

PURPOSE

To improve or maintain fish production and fishery use by making a favorable water habitat; supplementing natural food supplies; and reducing competition from unwanted plants and animals.

CONDITION WHERE PRACTICE APPLIES

In ponds, lakes, and reservoirs where a crop of fish is wanted. The shoreline of the fishpond shall be protected from domestic livestock use. Needed protective fencing shall be placed an average distance of at least 25 feet from the pond margin.

CONSIDERATIONS

Quantity

Effects on the water budget.

Quality

1. Effects of pesticide and nutrient use and fish feeding on surface and ground water quality.

2. Effects on the movement of dissolved substances to ground water.

3. Effects on wetlands or water-related wildlife habitats.

4. Effects on the visual quality of water resources.

PLANS AND SPECIFICATIONS

Consideration should be given to the installation of a drawdown tube for complete pond drainage to facilitate management.

Construction details and specifications for building fishponds are covered under Ponds - Embankment and Ponds - Excavated.

Fishponds shall not be constructed in sites likely to receive excessive sediment or pollution. The drainage area of fishponds shall not contain any sources of concentrated waste material such as those likely to occur from livestock feed yards, sewage out-falls, or sewage lagoon dumps.

The management and treatment of fishponds shall consist of one or more different treatments. Management shall not be attempted in ponds which do not at least meet minimum conditions for fishpond design criteria.

1. Stocking

Warm-water ponds shall be stocked with largemouth bass alone or largemouth bass and bluegill in combination. Cold-water ponds (highest temperature 70^0) shall be stocked with rainbow trout. The stocking rate of 100 bass and 400 bluegill per surface acre will be used when stocked in combination. A rate of 400 per surface acre shall be used when stocking bass or trout alone. All rates apply to fingerling size stock.

2. Control of Aquatic Vegetation

Vegetation shall be controlled by removal or shading against light. Vegetation can be removed by pulling, raking, or cutting. Vegetation may be killed by shading with black polyethylene or vinyl plastic. A sheet of desired size can be floated and anchored in place over area of desired treatment for a period of at least three weeks.

3. Renovation

Renovation is removal of unbalanced fish populations or unwanted fish prior to stocking or restocking. This shall be accomplished either through complete drainage of the reservoir or use of the chemical rotenone. A permit must be acquired from the Wyoming Game and Fish Department prior to use and all handling and use precautions must be observed. The application rate shall never exceed 3.0 ppm five percent (5%) active rotenone for bullheads or carp; or 1.0 ppm for other fish species. Water temperature shall exceed 45^0 F. when renovation is done.

4. Shoreline Modification

Deepen pond edges to at least three feet deep within nine feet of the shoreline.

5. Fish Stocking

Wyoming Regulations - It is illegal to import or release any live fish or fish eggs in waters of the State without authorization of the Wyoming

Game and Fish Department. Persons who plan to stock ponds with fish should be advised to write to the Director, Wyoming Game and Fish Department, State of Wyoming, Cheyenne, Wyoming 82009, giving the name and location of waters to be planted, number and kind of fish to be planted, and where fish will be obtained.

See NRCS Biology Technical Notes 32 and 40.

Specifications for establishment and operation of this practice shall be prepared for each field or treatment unit according to the Criteria, Considerations, and O&M described in this standard.

Specifications shall be recorded using approved certification sheets, job sheets, narrative statements in the conservation plan, or other acceptable methods.

Additional Documentation Required:

1. Location - Field Numbers and Map.

2. Surface acres and acre-feet of water, maximum depth.

3. Fish species benefiting.

4. Chemical analysis results of water.

5. Weed control plan.

6. Source and condition of fish stack.

7. Date and signature.

8. Date practice applied.

WY-ECS-41 and 42 are applicable to this practice.

Table 1

FISHPOND MANAGEMENT FOR COLDWATER SPECIES

SPECIES	FISH SIZE	STOCKING RATE PER SURFACE ACRE	WHEN TO STOCK	WHEN TO FISH	STOCKING FREQUENCY	MINIMUM POND DEPTH[1] RECOMMENDATIONS	MINIMUM POND SIZE
Rainbow, brook, or cutthroat trout[2]	Advanced fry 1" - 2"	1,000	When surface water is below 65°F. stock spring or fall.	When fish are 9 inches long.	With moderate fishing every second or third year, with heavy fishing yearly. Restock at one-half original rate.	With flow-through - 6' Without flow-through - 10'.	With flow-through - 0.25 surface area. Without flow-through - 0.5 surface area.
	Fingerlings 2" - 4"	300-500[3]	When surface water is below 65°F. stock spring or fall.	When fish are 9 inches long.	With moderate fishing every second or third year, with heavy fishing yearly. Restock at original rate	With flow-through - 6' Without flow-through - 10'.	With flow-through - 0.25 surface area. Without flow-through - 0.5 surface area.
	Catchable 7" - 9"	100-200[3]	When surface water is below 65°F.	Immediately	Stock as needed to maintain desired fishing success.	With flow-through - 6' Without flow-through - 10'.[4]	With flow-through - 0.25 surface area. Without flow-through - 0.5 surface area. [4]

[1] These standards will be applicable in nearly all situations and will provide a satisfactory installation.
[2] Rainbow trout perform most satisfactorily in ponds and produce the highest yield in pounds of fish per surface acre.
[3] The larger number to be stocked in fertile ponds, or ponds supplied with spring or well water. These rates can be doubled if a supplemental feeding program is planned.
[4] Where there is no desire to over-winter catchable trout, depth and pond size may be disregarded.